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G-000-704 .54

**RECLASSIFICATION OF THE WHEELABRATOR SHOT BLASTER,  
HAZARDOUS WASTE MANAGEMENT UNIT NO. 12**

03/09/95

DOE-0594-95  
DOE-FN      EPAS  
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LETTER

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**Department of Energy**  
**Fernald Environmental Management Project**  
P. O. Box 538705  
Cincinnati, Ohio 45253-8705  
(513) 648-3155

**MAR 9 - 1995**  
DOE-0594-95

Mr. Paul Pardi, Group Leader  
Southwest District Office  
Division of Hazardous Waste Management  
Ohio Environmental Protection Agency  
401 East Fifth Street  
Dayton, Ohio 45402-2911

Dear Mr. Pardi:


**RECLASSIFICATION OF THE WHEELABRATOR SHOT BLASTER, HAZARDOUS WASTE MANAGEMENT UNIT No. 12**

Enclosed is information supporting the reclassification of the Wheelabrator Shot Blaster, Hazardous Waste Management Unit (HWMU) No. 12, to a Solid Waste Management Unit (SWMU). This information was compiled from an extensive reevaluation of all data and documentation concerning the unit. Enclosure 1 provides a description of the Wheelabrator Shot Blaster and the rationale for reclassification. Enclosure 2 provides information on the most recent analytical results, sample location and unit location.

The Fernald Environmental Management Project (FEMP) requests the Ohio Environmental Protection Agency (OEPA) concurrence to reclassify the Wheelabrator Shot Blaster from a HWMU to SWMU.

If you have any questions regarding this matter, please contact John Sattler at (513) 648-3145.

Sincerely,

  
Jack R. Craig  
Director

FN:Sattler

Enclosures: As stated

cc w/enc:

K. H. Chaney, EM-423/QO  
J. Saric, USEPA Region V  
M. Suleiman, OEPA-Columbus  
T. Schneider, OEPA-Dayton  
T. Hagen, FERMCO  
Administrative Record, FERMCO  
RCRA Operating Record, FERMCO/30

cc w/o enc:

J. Reising, DOE-FN  
W. Quaider, DOE-FN  
J. Van Kley, Ohio AGO  
M. McDermontt, DOJ  
D. Ofte, FERMC0/1  
J. Theising, FERMC0/1  
M. Yates, FERMC0/2

## Enclosure 1

The Wheelabrator Shot Blaster (WSB) is located in the southwest corner of Building 66 (see enclosed Figure). The WSB measures approximately 10 feet by 10 feet by 6 feet with the HWMU area measured at 24 feet by 24 feet. The WSB is made of steel plates, sheet metal, and angle iron. The Wheelabrator operated from the mid-1950s until July 1989.

The unit was used in the second stage of drum reconditioning. Drums to be reconditioned were cleaned in the Drum Washer prior to being placed into the WSB. The WSB removed paint from old, empty drums by abrasively blasting the drum with iron shot. A dust collector (Wheelabrator Dust Collector - HWMU #13) was used to collect grit blast and paint dust generated by the WSB unit. The iron shot was continually added to make up for the worn shot abrasive. The containment bin of the WSB was cleaned out approximately every couple of months when the process operated. Paint and grit wastes generated by the process were drummed and characterized.

The WSB ceased operation by July 1989. The WSB was classified as a Hazardous Waste Management Unit (HWMU) in the October 1991 Part B Permit Application since the residues in the unit were initially thought to be characteristic due to the presence of cadmium (D006). The cadmium result was obtained from an analysis report dated in 1988. An investigation into the validity of the 1988 data report showed the data to be questionable. The investigation determined that the 1988 data was representative of material drummed in December 1985. Although the material was lot coded as being from the Wheelabrator, there was some question as to whether the material was actually from the unit. The material may have been in close proximity to the Wheelabrator unit and mistakenly lot coded as such. To date, no chain of custody is available for the 1985 samples.

In addition, since the Wheelabrator operated after 1985, the FEMP contends that the 1985 data should not have been used as a determining factor in the HWMU classification. The unit classification should be based on what material remains in the Shot Blaster after process operations ceased for a period of more than 90 days. Since the unit ceased operation in 1989, material remaining in the Shot Blaster after that date would be used to make a HWMU classification.

Analytical data obtained using the Toxicity Characteristic Leaching Procedure (TCLP) method on samples collected from the Shot Blaster in March 1991 showed Toxicity Characteristic (TC) metals concentrations below regulatory limits (see Enclosure 2). Enclosure 2 also provides information on the sample location and chain of custody record for the samples. Process knowledge indicates that spent solvents or organic compounds were not used in the shot blast operation. The complete characterization for the WSB residues is documented under MEF file 50088.

In summary, the Wheelabrator Shot Blaster residues do not exceed TC regulatory levels and the unit should be reclassified from a HWMU to a Solid Waste Management Unit (SWMU).



**FIGURE 1**

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## ENCLOSURE #2

WESTINGHOUSE TCLP ANALYSIS  
3555-00061

TCT SAMPLE NUMBER - 91000908  
WMCO SITE ID - 910304-031  
DATE RECEIVED - 03/06/91

REPORT DATE - 04/03/91  
MATRIX - Leachate  
RELEASE NUMBER - 349

## TCLP METALS

TCLP EXTRACTION DATE - 03/11/91

METHODS	PARAMETER	DETECTION LIMIT	CONC. (UG/L)	DATE ANALYZED	REGULATORY LEVEL (UG/L)
6010	ARSENIC	200	ND	03/13/91	5000
6010	BARIUM	200	ND	03/14/91	100000
6010	CADMIUM	100	ND	03/14/91	1000
6010	CHROMIUM	500	ND	03/14/91	5000
6010	LEAD	200	486	03/14/91	5000
6010	SELENIUM	328	ND	03/27/91	1000
6010	SILVER	50	ND	03/27/91	5000
7470	MERCURY	0.20	ND	03/26/91	200

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## WESTINGHOUSE TCLP ANALYSIS

3555-00061

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TCLP METALS

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TCLP EXTRACTION DATE - 03/11/91

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6010	BARIUM	200	ND	03/14/91	100000
6010	CADMIUM	100	ND	03/14/91	1000
6010	CHROMIUM	500	ND	03/14/91	5000
6010	LEAD	200	429	03/14/91	5000
6010	SELENIUM	328	ND	03/27/91	1000
6010	SILVER	50	ND	03/27/91	5000
7470	MERCURY	0.20	ND	03/26/91	200

WESTINGHOUSE MATERIALS COMPANY OF OHIO

P.O. BOX 398704, CINCINNATI, OHIO 45239-8704

Control #: \_\_\_\_\_

## ANALYSIS REQUEST / CUSTODY RECORD

Pg 1 of 1

PROJECT: DRUM RECONDITION; PLT	CLIENT: ENV CHAR & SURV	TECHNICIAN/EXT.: <i>A. Russell</i>
PROJECT #: PA-00-85501	CLIENT CONTACT: L Hall	CHARGE #: FBJ 01
PE/PM: S, Lund	PHONE: 6862	LOT MARK CODE:

[illegible]

Copy To: S. Lund, C. Hill, L Love

ITEM/REASON	RELINQUISHED BY	RECEIVED BY	DATE	TIME	ITEM/REASON	RELINQUISHED BY	RECEIVED BY	DATE	TIME
Analysis 1A11	G.M. Russell	S.D. Conroy	3-4-91	1450	all	S.D. Conroy	Pat. B. King	3-5-91	0735
208	S.D. Conroy	J. Crosson	3-5-91	1050	EM-2367	K. Young	J. Crosson	5-13-91	1300
2366	J. Kulkarni	J. Crosson	7-8-91	1440	EM-2364	K. Young	J. Crosson	10-3-91	12.00

0029



20'-0"

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STORAGE

OFFICE

NOTE 5

30 GAL  
REROLLER

DRUM FEED CONVEYOR

SHOT BLASTER

55 GAL  
EXPANDER

NOTE 5

2 samples  
of shot residue  
should be sampled  
from underneath  
rotating part.

PANGBORN DUST COLLECTOR

0 CERTIFIED FOR CONSTRUCTION

REV  
NO

ISSUE OR REVISION PURPOSE DESCRIPTION

A-E OPER  
INITIALS AND C

UNITED STATES  
DEPARTMENT OF ENERGY

IACORS ENGINEERING GROUP INC.

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